

IN THE UNITED STATES PATENT AND TRADEMARK OFFICERECEIVED  
CENTRAL FAX CENTER

Applicant: Edward W. Stark      Examiner: R.A. Rosenberger  
 Serial No. 08/818,289      Group Art Unit: 2877  
 Filed: March 14, 1997      Docket No. 653.001US1  
 Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND  
 TRANSMITTANCE MEASUREMENTS

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FEB 02 2006

**MAIL STOP PETITION**

Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

**PETITION TO REVIVE AN UNINTENTIONALLY ABANDONED  
 APPLICATION UNDER 37 CFR 1.137(b)**

Dear Sir/Madam:

**FACTUAL BACKGROUND**

- 1) A Notice of Allowance and Issue Fee Due was mailed by the U.S. Patent and Trademark Office on July 30, 2003, with a due date for payment of the Issue Fee identified on the Notice of Allowance as October 30, 2003. There was a note on the Notice of Allowability that corrected drawings were to be submitted.
- 2) Attorney for Applicant signed the transmittal documents for the Payment of the Issue Fee, provided a transmittal cover sheet for transmittal of the documents, submitted the formal documents with a transmittal sheet to the draftsman, authorized payment of the issue fee in a separate document, and included a return postcard identifying all of these documents.
- 3) All documents described in paragraph 2) above were mailed with a certification of mailing under 37 C.F.R. 1.8 with a mailing date of October 24, 2003..
- 4) The return postcard was returned to Attorney for Applicants with a date of receipt in the U.S. Patent and Trademark Office of October 27, 2003, which date is consistent with the mailing date of October 24, 2003, as October 25 and 26 were a Saturday and a Sunday, respectively, when the US Patent and Trademark Office was closed.

- 5) On December 15, 2003, the U.S. Patent and Trademark Office mailed a Notice of Abandonment on the Application, indicating that Applicant failed to file new corrected drawings on or before paying the required Issue Fee.
- 6) As the documents included with this Petition clearly shows that all formalities with the inadvertent exception of the formal drawings for this Application were timely performed by Attorney for Applicants and timely received by the U.S. Patent and Trademark Office, the Abandonment of this Application is clearly in error, was inadvertent and/or unintentional, and should be accepted at this time.
- 8) Applicants, through their Attorney of Record, hereby petition to have the Application issued as a U.S. Patent, and to have the Abandonment withdrawn.
- 9) **The fee required for a petition to revive an unintentionally abandoned application under 1.17(m), the amount set forth of \$665.00 (small entity applies), is hereby authorized to be withdrawn from Attorney's Deposit Account No. 50-1391.**

The required reply in this application, in addition to paying the Issue fee, was submitting new corrected drawings, which are respectfully submitted at this time. An Amendment and Response are also being respectfully submitted at this time. As the corrected drawings have now been submitted, the Application should be re-opened.

Applicants hereby petition to revive the application due to the fact that the delay in filing the response to the Office Action causing by the abandonment of the application was unintentional and/or inadvertent, and was the sole responsibility of the U.S. Patent and Trademark Office.

The contact person is invited to telephone Applicant's attorney (952) 832-9090 if necessary. **If necessary please charge any additional fees to Deposit Account No. 50-1391 for the petition for revive unintentional abandonment under 37 CFR 1.137(b).**

Respectfully submitted,

EDWARD W. STARK

By His Representatives,

Mark A. Litman & Associates, P.A.  
York Business Center, Suite 205  
3209 West 76<sup>th</sup> Street  
Edina, MN 55435  
(952) 832-9090

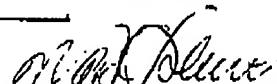
Date: 12 January 2004

By Mark A. Litman

Mark A. Litman  
Reg. No. 26,390  
(952) 932-9090

CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described herein, are being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on 12 January 2004

Mark A. Litman  
Name

  
Signature

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MARKLITMANASSOC

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COPY



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EDINA, MN. 55435

55435-8246 . . . . .

Receipt is hereby acknowledged for the following in the U.S. Patent  
and Trademark Office:

Applicant: Edward W. Stark      Examiner: R. A. Rosenberger  
Serial No.: 08/818,289      Group Art Unit: 2877  
Filed: March 14, 1997      Docket: 653.001US1  
Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND  
TRANSMITTANCE MEASUREMENTS

Contents:

- Form PTOL-85B (1pg), plus one copy
- Communication re: Issue Fee Transmittal, with Authorization for Fee
- Copy of Notice of Allowance and Issue Fee Due, Notice of Allowability, Examiner's Amendment, I Determination of Patent Term Adjustment, and Notice of Fee Increase
- Communication re: Small Entity / Individual Inventor Communication
- Transmittal Sheet
- Return postcard

Date of Deposit: October 24, 2003

received

10-31-03 AM



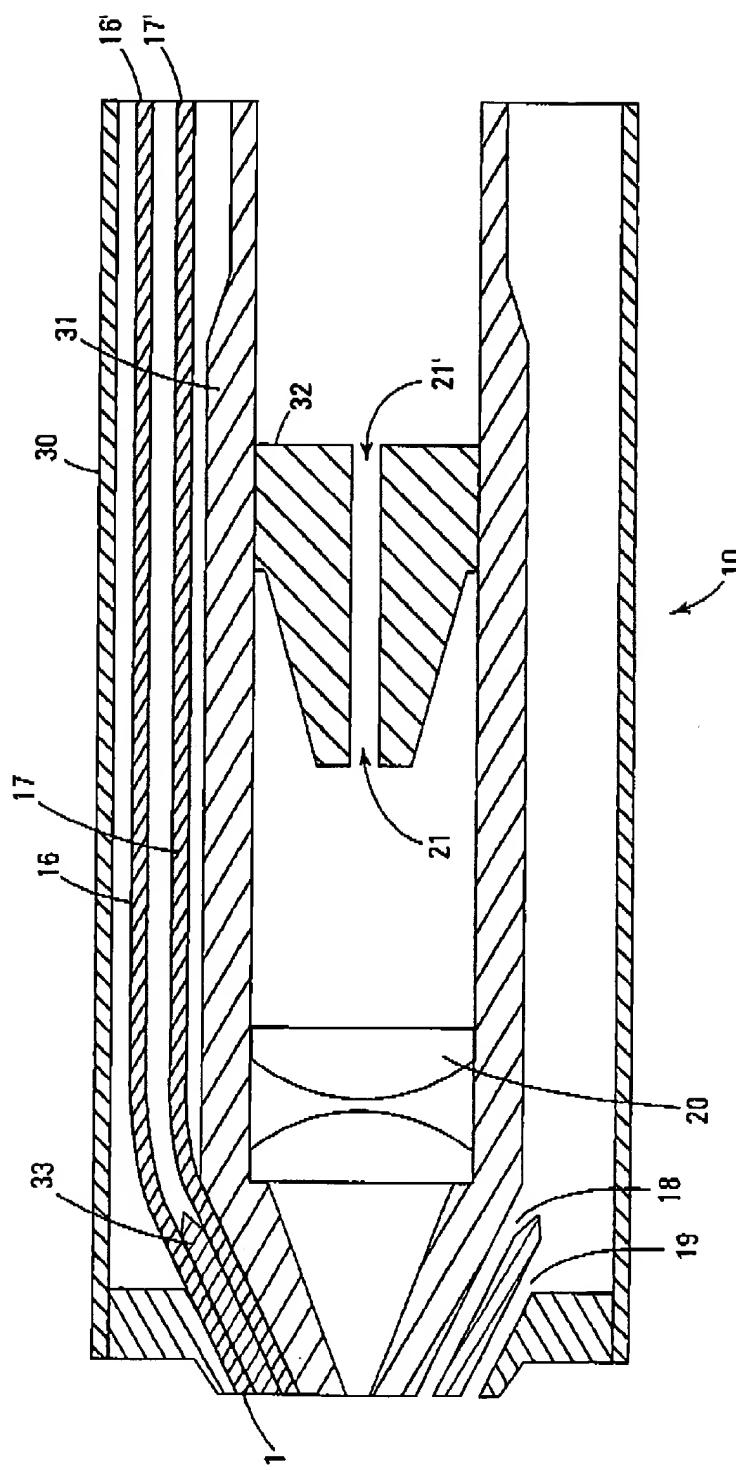
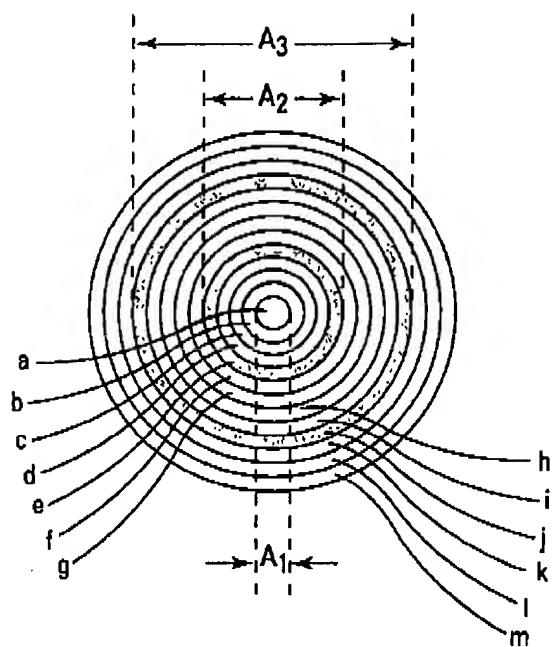


Fig. 1



*Fig. 2*

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CENTRAL FAX CENTER 952 832 9191 P.11

**AMENDMENT AND RESPONSE**

Serial Number: 08/818,289

Filing Date: March 14, 1997

Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND TRANSMITTANCE MEASUREMENTS

**FEB 02 2006**

Page 1

Dkt:65 3.001US1

**S/N 08/818,289**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Edward W. Stark

Examiner: R. A. Rosenberger

Serial No.: 08/818,289

Group Art Unit: 2877

Filed: March 14, 1997

Docket: 653.001US1

Title: **METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND  
TRANSMITTANCE MEASUREMENTS**

**AMENDMENT AND RESPONSE**

MAIL STOP: AMENDMENT

P.O. BOX 1450

Commissioner for Patents

Alexandria, VA 22313-1450

Dear Sir:

This Amendment is being filed in association with the Petition to revive and Inadvertently Abandoned Application (for failure to submit corrected Figures) and Submission of Corrected Figures.

**The U.S. Patent and Trademark Office is hereby authorized to debit attorney's Deposit Account No. 501391 for all fees and charges associated with this Amendment.**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner of Patents, Washington, D.C. 20231 on January 12, 2004.

Name MARK A. LITMAN

Signature Mark A. Litman

**AMENDMENT AND RESPONSE**

Serial Number: 08/818,289

Filing Date: March 14, 1997

Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND TRANSMITTANCE MEASUREMENTSPage 2  
Dkt:65 3.001 US1**IN THE SPECIFICATION****Please amend original Page 5, lines 13-15 as follows:**

Figure 1 is Figures 1A and 1B are a cross-sectional, length-wise view in partially schematic form of a two-ring, central aperture probe in accordance with the invention; and

A clean copy of this amended text is provided immediately below:

Figure 1 is a cross-sectional, length-wise view in partially schematic form of a two-ring, central aperture probe in accordance with the invention; and

**Please amend page 5, lines 20-34 as shown below:**

A first aspect of this invention comprises the use of three or more optical apertures shared among the source and illumination functions so as to provide two or more independent signals for further processing and analysis. For example, in Figure 1A-Figure 1, a probe utilizing fiber optics is shown which has two ring apertures surrounding a central round aperture.

In Figure 1AIn Figure 1, the probe 10 includes a cylindrical outer body 30 in which a concentric inner body 31 is arranged. The inner body 31 tapers at the examining end to a central aperture 15. The outer body 30 constricts at the examining end to define a conical, inwardly directed wall. The tapered end of the inner body 31 defines a second conical wall. Between these two walls 30, 31 is disposed a conical dividing element 33. The angles defined by these two walls and the conical dividing element are preferably the same. Conical annular spaces or rings (shown in

A clean copy of this amended text is provided immediately below:

**AMENDMENT AND RESPONSE**

Serial Number: 08/818,289

Filing Date: March 14, 1997

Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND TRANSMITTANCE MEASUREMENTS

Page 3

Dkt:65 3.001 US1

A first aspect of this invention comprises the use of three or more optical apertures shared among the source and illumination functions so as to provide two or more independent signals for further processing and analysis. For example, in Figure 1, a probe utilizing fiber optics is shown which has two ring apertures surrounding a central round aperture.

In Figure 1, the probe 10 includes a cylindrical outer body 30 in which a concentric inner body 31 is arranged. The inner body 31 tapers at the examining end to a central aperture 15. The outer body 30 constricts at the examining end to define a conical, inwardly directed wall. The tapered end of the inner body 31 defines a second conical wall. Between these two walls 30, 31 is disposed a conical dividing element 33. The angles defined by these two walls and the conical dividing element are preferably the same. Conical annular spaces or rings (shown in

**Please amend page 8, lines 17-21 as shown below:**

The detection signal is then gated or demodulated to separate the information from the two different sources. ~~As shown in Figure 1B, each~~ Each source fiber optic bundle, preferably, has a small percentage of its input fibers brought out so that the associated source intensity and modulation can be monitored. It

**A clean copy of this amended text is provided immediately below:**

The detection signal is then gated or demodulated to separate the information from the two different sources. Each source fiber optic bundle, preferably, has a small percentage of its input fibers brought out so that the associated source intensity and modulation can be monitored. It

**Please insert the following new paragraphs into page 12 between lines 7 and 8.**

**AMENDMENT AND RESPONSE**

Serial Number: 08/818,289

Filing Date: March 14, 1997

Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND TRANSMITTANCE MEASUREMENTSPage 4  
Dkt:65 3.001US1

In Figure 2, thirteen concentric circular regions (**A1, A2, A3, a, b, c, d, e, f, g, h, i, and j**) are shown. Regions **A1, A2, and A3** are detection apertures and regions **a through j** are source apertures. The dimensions and properties of these regions are shown in Tables 2 and 3.

**Table 2: Detection Aperture Dimensions**

<u>Detection Aperture</u>	<u>Outside Diameter mm</u>	<u>Inside Diameter mm</u>	<u>Area mm<sup>2</sup></u>
<u>A1</u>	<u>1.92</u>	<u>0.00</u>	<u>2.90</u>
<u>A2</u>	<u>7.81</u>	<u>7.55</u>	<u>3.20</u>
<u>A3</u>	<u>15.31</u>	<u>15.17</u>	<u>3.37</u>

**Table 3: Source Aperture Configurations**

<u>Region</u>	<u>Inside Diameter Φ mm</u>	<u>Outside Diameter Φ mm</u>	<u>Area mm<sup>2</sup></u>	<u>Active Area %</u>	<u>Active Area mm<sup>2</sup></u>	<u>Ref. Fiber %</u>	<u>Ref. Fiber mm<sup>2</sup></u>
<u>a</u>	<u>1.92</u>	<u>3.85</u>	<u>8.8</u>	<u>90</u>	<u>7.90</u>	<u>10</u>	<u>0.9</u>
<u>b</u>	<u>3.85</u>	<u>5.70</u>	<u>14.5</u>	<u>90</u>	<u>13</u>	<u>10</u>	<u>1.45</u>
<u>c</u>	<u>5.70</u>	<u>7.55</u>	<u>20.2</u>	<u>90</u>	<u>17.2</u>	<u>10</u>	<u>2.0</u>
<u>d</u>	<u>7.81</u>	<u>10.21</u>	<u>34</u>	<u>50</u>	<u>17</u>	<u>5</u>	<u>1.7</u>
<u>e</u>	<u>10.21</u>	<u>12.66</u>	<u>43</u>	<u>50</u>	<u>21.5</u>	<u>5</u>	<u>2.2</u>
<u>f</u>	<u>12.66</u>	<u>15.17</u>	<u>52</u>	<u>50</u>	<u>26</u>	<u>5</u>	<u>2.6</u>
<u>g</u>	<u>15.31</u>	<u>17.30</u>	<u>51.1</u>	<u>40</u>	<u>20.4</u>	<u>4</u>	<u>2</u>
<u>h</u>	<u>17.30</u>	<u>19.30</u>	<u>57.5</u>	<u>40</u>	<u>23</u>	<u>4</u>	<u>2.3</u>
<u>i</u>	<u>19.30</u>	<u>21.30</u>	<u>63.7</u>	<u>40</u>	<u>25.5</u>	<u>4</u>	<u>2.6</u>
<u>j</u>	<u>21.30</u>	<u>23.30</u>	<u>70</u>	<u>40</u>	<u>28</u>	<u>4</u>	<u>2.8</u>

A clean copy of the inserted text, without underlining is provided below:

In Figure 2, thirteen concentric circular regions (**A1, A2, A3, a, b, c, d, e, f, g, h, i, and j**) are shown. Regions **A1, A2, and A3** are detection apertures and regions **a through j** are source apertures. The dimensions and properties of these regions are shown in Tables 2 and 3.

**AMENDMENT AND RESPONSE**

Serial Number: 08/818,269

Filing Date: March 14, 1997

Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND TRANSMITTANCE MEASUREMENTSPage 5  
Dkt:65 3.001US1**Table 2: Detection Aperture Dimensions**

<b>Detection Aperture</b>	<b>Outside Diameter mm</b>	<b>Inside Diameter mm</b>	<b>Area mm<sup>2</sup></b>
A1	1.92	0.00	2.90
A2	7.81	7.55	3.20
A3	15.31	15.17	3.37

**Table 3: Source Aperture Configurations**

<b>Region</b>	<b>Outside Diameter Φ mm</b>	<b>Area mm<sup>2</sup></b>	<b>Active Area %</b>	<b>Active Area mm<sup>2</sup></b>	<b>Ref. Fiber %</b>	<b>Ref. Fiber mm<sup>2</sup></b>
a	3.85	8.8	90	7.9	10	0.9
b	5.70	14.5	90	13	10	1.45
c	7.55	20.2	90	17.2	10	2.0
d	10.21	34	50	17	5	1.7
e	12.66	43	50	21.5	5	2.2
f	15.17	52	50	26	5	2.6
g	17.30	51.1	40	20.4	4	2
h	19.30	57.5	40	23	4	2.3
i	21.30	63.7	40	25.5	4	2.6
j	23.30	70	40	28	4	2.8

**AMENDMENT AND RESPONSE**

Serial Number: 08/818,289

Filing Date: March 14, 1997

Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND TRANSMITTANCE MEASUREMENTSPage 6  
Dkt:65 3.001US1**REMARKS**

The above additions to the specification are taken almost literally from the information on Figures 1A (now Figure 1) and Figure 2 and the description in the original specification. Only the symbolic lettering (e.g., a, b,...etc.), the word "thirteen" which number of segments is shown in original Figure 2, and the "regions" are not literally disclosed. However the concept of these terms is clearly present in the originally filed documents and therefore does not indicate the presence of new matter or issues under 35 USC 112, first or second paragraphs.

**AMENDMENT AND RESPONSE**

Serial Number: 08/818,289

Filing Date: March 14, 1997

Title: METHOD AND APPARATUS FOR OPTICAL INTERACTANCE AND TRANSMITTANCE MEASUREMENTSPage 7  
Dkt:65 3.001US1**CONCLUSION**

Applicant respectfully submits that the claims and application are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant=s attorney at (952) 832.9090 to facilitate prosecution of this application.

Respectfully submitted,  
**EDWARD W. STARK**  
By their Representatives,  
Mark A. Litman & Associates, P.A.  
York Business Center  
Suite 205  
3209 W. 76<sup>th</sup> Street  
Edina, MN 55435  
(952) 832.9090  
By Mark A. Litman  
Mark A. Litman  
Reg. No. 26,390

Date January 12, 2004

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop: AMENDMENT; P.O. BOX 1450; Commissioner of Patents, Alexandria, VA 22313-1450 on January 12, 2004.

Name

Mark A. Litman

Signature

Mark A. Litman

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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**COMMUNICATION RE: SUBMISSION OF FORMAL DRAWINGS**

**MAIL STOP PETITION**  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

Enclosed please find 2 sheets of formal drawings for the above-identified application.

The Examiner is invited to contact Applicant's Representatives, at the below-listed telephone number, if any further changes need to be made to the enclosed drawings. Authorization is hereby given to charge any fees that are owed for the submission of these drawings to Deposit Account Number 50-1391.

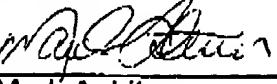
Respectfully submitted,

**EDWARD W. STARK**

By His Representatives,

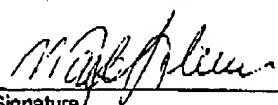
Mark A. Litman & Associates, P.A.  
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Date: January 12, 2004

By   
 Mark A. Litman  
 Reg. No. 26,390

CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described herein, are being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on January 12, 2004.

Mark A. Litman  
 Name

  
 Signature